

31. (New) The method according to claim 22, wherein the first and second segmentation strategies differ in terms of mathematical method.

32. (New) The method according to claim 22, wherein the first and second scores are combined through regression.

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REMARKS

Claims 1-21 are active and pending in the present application. In addition, the present preliminary amendment includes newly added claims 22-32. Great care has been taken to ensure no new matter has been improperly introduced by the newly added claims.

The present invention relates to combining the scores/ranks, or results, from different segmentation strategies. In particular to the present application, segmentation strategies are being used for evaluating customers for such purposes as increasing a marketing offers' response rate, revenue, profitability, and quantity of individual items sold per individual transaction.

In general, a segmentation strategy is a way to make distinctions within and between customers and/or customer groups.

An example of a segmentation strategy is logistic segmentation which could be used in customer evaluations to determine such things that can be answered with yes or no questions (for example, "will the customer purchase?"). Basically, logistic segmentation works by running a set of prepared data through a regression formula. The format of the results can be described as a multivariate formula (or model). Based on these results, the population can be scored via the model and each resulting score can be viewed individually, or can be assigned to score-based groups (for example, decile or percentile based groups).

Linear segmentation is another example of a segmentation strategy. This is similar to logistic segmentation but is intended to answer scalar questions (for example, "how much will the customer purchase?").

The conventional wisdom of the marketing industry has been that for each set of known data and for each prediction about a particular customer group, there is one segmentation strategy (of all the available ones) that will produce the best result. As a result, the other segmentation strategies are ignored as they are considered to be weaker indicators of the variance within the customer population.

The present claims recite a method for segmenting members of a population that is contrary to such conventional wisdom. None of the results from any of the different segmentation strategies are ignored. Instead, results from more than one segmentation strategy are generated for all members of the population and then a respective composite score is generated for each member by combining the results of the more than one segmentation strategy.

During prosecution of the parent application, an article describing combining Bayesian models was applied as prior art to reject the claims. Applicants urge that combining models, such as Bayesian models, is significantly different from combining segmentation strategy results as recited in the present claims.

In general, a model, such as a Bayesian model, as described in the applied reference, is used for purposes such as long term medical studies.

By definition, these models only "model" the data and are not perfect. Accordingly, for some statistical data, more than one Bayesian model may model the data for a single purpose sufficiently close so that each such model could be utilized separately.

The authors of the article recognized that there may be some way to combine the Bayesian models (at the model level, not the score or ranking level) to make an improved model. However, the authors describe combining "models" and not "segmentation strategy results". A model differs from a segmentation strategy result in at least the following ways: a model is a multivariate formula; it requires significant manipulation to combine with other multivariate formulas; models, to be combined, need to have known and measurable similarities. As a result, "combining models" is very different than "combining segmentation strategy results."

The result of combining the different models to arrive at an "improved" model does not involve running different segmentation strategies to generate different,

respective results, as recited in the claims. In Bayesian model averaging, it is an end unto itself. One way to consider the difference to the present application is that the resulting "improved" model could be used as one of a plurality of segmentation strategies to produce a set of results. In accordance with the claims, such results would then be combined with some other segmentation strategy results to form a respective composite score for each population member.

As further evidence that the combining of models as described within the article is NOT the same as the statistical combination of segmentation strategy results as described within the present specification and recited in the claims, the following comments from the applied article are noted:

1. In Bayesian model averaging, "the number of terms in [the combination] can be enormous, rendering exhaustive summation infeasible" (p. 384).
2. "The integrals implicit in [the combination] can in general be hard to compute" (p.384) and "another difficulty in implementing BMA is that the integrals of the form (3) and (1) can be hard to compute." (p.386)
3. "[T]his approximation is not easy to compute for generalized linear models using readily available software." (p. 388).
4. "One common criticism of model averaging is that the results may be too complicated to present easily." (p. 398)
5. "...implementing BMA in high-dimensional problems with correlated variable, such as non-parametric regression, is still a challenge from both a computational standpoint and the choice of prior distributions." (p. 403)

Applicants urge that none of the above five statements would have been made if model averaging is the same as, or similar to, combining the results of segmentation strategies, as the Examiner contends in stating the rejection. To maintain the Examiner's position, all of the above statements must be ignored or given no meaning whatsoever.

As described in the specification of the present application, the claimed system and method do not suffer from any of the above 5 problems identified with respect to model averaging. Instead, the differences between the claims and the prior art result in benefits and advantages over the prior art such as working with relatively simple combinations of segmentation strategy results which are easily presented to a user and using combinations of strategy results that are generally easy to compute by utilizing

techniques implemented in basic, commercially-available statistical software packages. As a result, the present system and method permit segmenting members of a population more effectively and easily than previously known methods and techniques. Accordingly, Applicants urge that model averaging (the applied art) and the combining of segmentation strategy results (as recited in the present claims) are different methods that produce significantly different results and, therefore, Bayesian modeling averaging is not equivalent to, nor suggestive of, combining segmentation strategy results as recited in the present claims.

SUMMARY

Applicants believe that in light of the above remarks and amendments that claims 1-32 are in condition for allowance and passage of this case to issue is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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